Serial No.: 10/619,789 Filed: July 15, 2003 Page: 2 of 10

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

# **Listing of Claims**:

1. - 3. (cancelled)

4. (currently amended) An active noise reduction (ANR) headset system comprising:

a headset circuitry receiving an input voltage; and

a power supply providing the input voltage to the headset circuitry, the power supply comprising:

a direct current (DC) voltage source supplying power; and

a voltage converter circuit converting the power to the input voltage supplied to the headset circuitry, the voltage converter circuit varying the input voltage in response to changes to a headset load current drawn by the headset circuitry from the power supply,

a shutoff circuit placing the headset circuitry in a lower power consumption state when the headset load current falls below a threshold value for a predetermined amount of time,

The system of claim 2, wherein the shutoff circuit further comprises:

a band pass filter having an input signal based on a measured headset load current and an output signal that is compared to the threshold value.

5. (original) The system of claim 4, wherein the shutoff circuit comprises:

Serial No.: 10/619,789 Filed: July 15, 2003 Page: 3 of 10

a comparator comparing the threshold value to a filter output based on the measured headset load current; and

a timer reset circuitry sending a signal to place the headset circuitry in a lower power consumption state.

#### 6. - 9. (cancelled)

10. (currently amended) An active noise reduction (ANR) headset system comprising:

a headset circuitry receiving an input voltage; and

a power supply providing the input voltage to the headset circuitry, the power supply comprising:

a direct current (DC) voltage source supplying power; and

a voltage converter circuit converting the power to the input voltage supplied to the headset circuitry, the voltage converter circuit varying the input voltage in response to changes to a headset load current drawn by the headset circuitry from the power supply,

a shutoff circuit placing the headset circuitry in a lower power consumption state when the headset load current falls below a threshold value for a predetermined amount of time,

The system of claim 1-wherein the headset circuitry comprises:

an ANR circuit receiving a signal from a microphone positioned in an earcup and including a feedback loop to actively reduce the signal;

a first voltage regulator limiting a voltage supplied to the ANR circuit and to an amplifier to a first predetermined voltage; and

Serial No.: 10/619,789 Filed: July 15, 2003 Page: 4 of 10

a second voltage regulator limiting the input voltage of the headset circuitry to a second predetermined voltage.

### 11. - 15. (cancelled)

16. (currently amended) An active noise reduction (ANR) headset system comprising:

a headset circuitry receiving an input voltage; and

a power supply providing the input voltage to the headset circuitry, the power supply comprising:

a direct current (DC) voltage source supplying power; and

a voltage converter circuit converting the power to the input voltage supplied to the headset circuitry, the voltage converter circuit varying the input voltage in response to changes to a headset load current drawn by the headset circuitry from the power supply; and

a shutoff circuit placing the headset circuitry in a lower power consumption state when the headset load current falls below a threshold value for a predetermined amount of time,

The system of claim 13, wherein the shutoff circuit further comprises:

a band pass filter having an input signal based on a measured headset load current and an output signal that is compared to the threshold value.

17. (original) The system of claim 16, wherein the shutoff circuit comprises:

a comparator comparing the threshold value to a filter output based on the measured headset load current; and

Serial No.: 10/619,789 Filed: July 15, 2003 Page: 5 of 10

a timer reset circuitry sending a signal to place the headset circuitry in a lower power consumption state.

18. - 20. (cancelled)

21. (currently amended) An active noise reduction (ANR) headset system comprising:

a headset circuitry receiving an input voltage; and

a power supply providing the input voltage to the headset circuitry, the power supply comprising:

a direct current (DC) voltage source supplying power; and

a voltage converter circuit converting the power to the input voltage supplied to the headset circuitry, the voltage converter circuit varying the input voltage in response to changes to a headset load current drawn by the headset circuitry from the power supply; and

a shutoff circuit placing the headset circuitry in a lower power consumption state when the headset load current falls below a threshold value for a predetermined amount of time,

The system of claim 13 wherein the headset circuitry comprises:

an ANR circuit receiving a signal from a microphone positioned in an earcup and including a feedback loop to actively reduce the signal;

a first voltage regulator limiting a voltage supplied to the ANR circuit and to an amplifier to a first predetermined voltage; and

Serial No.: 10/619,789 Filed: July 15, 2003 Page: 6 of 10

a second voltage regulator limiting the input voltage of the headset circuitry to a second predetermined voltage.

### 22. - 26. (cancelled)

27. (currently amended) An active noise reduction (ANR) headset system comprising:

a headset circuitry receiving an input voltage; and

a shutoff circuit placing the headset circuitry in a lower power consumption state when a headset load current falls below a threshold value for a predetermined amount of time,

The system of claim 24, wherein the shutoff circuit further comprises:

a band pass filter having an input signal based on a measured headset load current and an output signal that is compared to the threshold value.

28. (original) The system of claim 27, wherein the shutoff circuit comprises:

a comparator comparing the threshold value to a filter output based on the measured headset load current; and

a timer reset circuitry sending a signal to place the headset circuitry in a lower power consumption state.

### 29. - 32. (cancelled)

33. (currently amended) An active noise reduction (ANR) headset system comprising:

a headset circuitry receiving an input voltage; and

a shutoff circuit placing the headset circuitry in a lower power consumption state when a headset load current falls below a threshold value for a predetermined amount of time,

Serial No.: 10/619,789 Filed: July 15, 2003 Page: 7 of 10

The system of claim 24 wherein the headset circuitry comprises:

an ANR circuit receiving a signal from a microphone positioned in an earcup and including a feedback loop to actively reduce the signal;

a first voltage regulator limiting a voltage supplied to the ANR circuit and to an amplifier to a first predetermined voltage; and

a second voltage regulator limiting the input voltage of the headset circuitry to a second predetermined voltage.

## 34. - 40. (cancelled)

41. (currently amended) A power supply for an active noise reduction headset, comprising:

a direct current (DC) voltage source supplying power; and a voltage converter circuit converting the power to the input voltage supplied to the headset circuitry, the voltage converter circuit varying the input voltage in response to changes to a headset load current drawn by the headset circuitry from the power supply,

a shutoff circuit placing the headset circuitry in a lower power consumption state when the headset load current falls below a threshold value for a predetermined amount of time,

The power supply of claim 39, wherein the shutoff circuit further comprises:

a band pass filter having an input signal based on a measured headset load current and an output signal that is compared to the threshold value.

42. (currently amended) A power supply for an active noise reduction headset, comprising:

Serial No.: 10/619,789 Filed: July 15, 2003 Page: 8 of 10

a direct current (DC) voltage source supplying power; and a voltage converter circuit converting the power to the input voltage supplied to the headset circuitry, the voltage converter circuit varying the input voltage in response to changes to a headset load current drawn by the headset circuitry from the power supply,

a shutoff circuit placing the headset circuitry in a lower power consumption state when the headset load current falls below a threshold value for a predetermined amount of time,

The power supply of claim 39, wherein the shutoff circuit comprises:

a comparator comparing the threshold to a filter output based on the measured headset load current; and

a timer reset circuitry sending a signal to place the headset circuitry in a lower power consumption state.

#### 43. - 51. (cancelled)

52. (currently amended) A power supply for an active noise reduction headset circuit, comprising:

a shutoff circuit placing the headset circuitry in a lower power consumption state when a headset load current falls below a threshold value for a predetermined amount of time,

The power supply of claim 49, wherein the shutoff circuit further comprises:

a band pass filter having an input signal based on a measured headset load current and an output signal that is compared to the threshold value.

53. (original) The power supply of claim 52, wherein the shutoff circuit comprises:

Serial No.: 10/619,789 Filed: July 15, 2003 Page: 9 of 10

a comparator comparing the threshold to a filter output based on the measured headset load current; and

a timer reset circuitry sending a signal to place the headset circuitry in a lower power consumption state.

54. - 66. (cancelled)